

**What is claimed is:**

1. A method of reducing the amount of adipose tissue in a subject comprising administering to the subject an amount of an sFRP-5 peptide effective to reduce the amount of adipose tissue, or an amount of a molecule effective to stimulate expression of the sFRP-5 peptide in the subject.
2. The method of claim 1, wherein the molecule effective to stimulate expression of the sFRP-5 peptide in the subject is a polypeptide having 90% identity to SEQ ID NO. 1.
3. The method of claim 2, wherein the polypeptide has 91% identity to SEQ ID NO. 1.
4. The method of claim 3, wherein the polypeptide has 92% identity to SEQ ID NO. 1.
5. The method of claim 4, wherein the polypeptide has 95% identity to SEQ ID NO. 1.
6. The method of claim 5, wherein the polypeptide has 99% identity to SEQ ID NO. 1.
7. The method of claim 1, wherein the method comprises administration of an sFRP-5 peptide.
8. The method of claim 1, wherein the subject is human.
9. The method of claim 1, wherein the administration is parenteral, intradermal, transdermal, transmucosal, rectal, subcutaneous, or by inhalation.

10. A method for identifying a molecule that reduces the amount of adipose tissue in a subject comprising
  - (a) contacting a candidate molecule with tissue from the subject which expresses an sFRP-5 peptide; and
  - (b) determining the level of expression of sFRP-5 or fragment thereof by the cell contacted by the candidate molecule,wherein a molecule that induces an increase in the level of expression of sFRP-5 peptide is a molecule capable of reducing the amount of adipose tissue in the subject.
11. The method of claim 10, wherein the candidate molecule is a polypeptide having 90% identity to SEQ ID NO. 1.
12. The method of claim 11, wherein the polypeptide has 91% identity to SEQ ID NO. 1.
13. The method of claim 12, wherein the polypeptide has 92% identity to SEQ ID NO. 1.
14. The method of claim 13, wherein the polypeptide has 95% identity to SEQ ID NO. 1.
15. The method of claim 14, wherein the polypeptide has 99% identity to SEQ ID NO. 1.
16. The method of claim 10, wherein the polypeptide is an sFRP-5 peptide.
17. A method of reducing the level of adipose tissue formation in a subject comprising administering to the subject an amount of an sFRP-5 peptide effective to reduce the level of adipose tissue formation, or an amount of a molecule effective to stimulate expression of the sFRP-5 peptide in the subject.